THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 56

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

FRANK SANNS, JR.

Junior Party

V.

ELOY C. MARTINEZ

Junior Party

Interference No. 103,446

Before CAROFF, DOWNEY and METZ, Administrative Patent Judges.

METZ, Administrative Patent Judge.

FINAL DECISION

¹ Application Serial Number 07/920,219, filed on July 24, 1992. Accorded benefit of Application Serial Number 07/371,640, filed on June 26, 1989. On this record, the involved application is unassigned.

² Application Serial Number 07/528,011, filed on May 23, 1990, now U.S. Patent Number 5,036,118, issued on July 30, 1991. Accorded benefit of Application Serial Number 07/259,214, filed on October 17, 1988. On this record, the involved patent is unassigned.

The subject matter contested in this interference is directed to a cured, filled polyurethane/polyurea polymer composition having dispersed therein a particular mica filler. The surface of the filled polymer composition, when painted and compared with the painted surface of similarly painted steel, exhibits a distinctness of image (DOI) within about 10 (ten) DOI units of the DOI of said similarly painted steel. The cured and filled polymers are useful in the manufacture of automobile parts such as fenders and doors. Automobile parts manufactured from said polymers are lighter than comparable metal parts which enable a reduction in the overall weight of the finished automobile which yields improved fuel economy.

The specific interfering subject matter contested by the parties is defined by the sole count in this interference, Count 1, which is set forth as follows:

A filled polymer composition comprising a polyurethane and/or polyurea matrix having dispersed therein a mica filler having a thickness of less than about 1.5 micrometers and an aspect ratio of greater than about 40, the surface of the composition exhibiting a distinctness of image when painted that is within about 10 DOI units of the distinctness of image of similarly painted steel.

The claims of the parties which correspond to Count

1 are:

Sanns: Claims 9 through 11

Martinez: Claims 1 through 25

Both parties filed briefs and Sanns filed a reply brief. Both parties appeared for oral argument at final hearing represented by their respective legal representatives. No issue of interference-in-fact was raised.

The sole issue presented for our consideration in this proceeding is priority of invention.

Sanns presented a record including deposition testimony and associated documentary exhibits in support of their case for priority³. Martinez has elected to rely on his October 17, 1988, benefit priority date in this interference.

Sanns, as the junior party whose application was copending with Martinez' U.S. application which matured to Martinez' involved U.S. patent, bears the burden of proving his case for priority by a preponderance of the evidence.

Morgan v. Hirsch, 728 F.2d 1449, 221 USPQ 193 (Fed. Cir. 1984); Peeler v. Miller, 535 F.2d 647, 190 USPQ 117 (CCPA 1976).

References to the Sanns record will be designated as SR, followed by the record page number, and references to the Sanns exhibits will be designated SX, followed by the exhibit number.

In order to be awarded priority in this interference, Sanns must prove an actual reduction to practice prior to October 17, 1988, Martinez' effective filing date.

Alternatively, Sanns could prevail by proving a conception of the subject matter of

the count before Martinez' effective filing date of October 17, 1988, coupled with reasonable diligence just prior to October 17, 1988, up to a reduction to practice (constructive or actual) by Sanns. Jepson v. Egly, 231 F.2d 947, 109 USPQ 354 (CCPA 1956); Hull v. Davenport, 90 F.2d 103, 33 USPQ 506 (CCPA 1937); Wilson v. Sherts, 21 F.2d 1070, 28 USPQ 379 (CCPA 1936).

SANNS' CASE FOR PRIORITY

In his preliminary statement (Paper Number 8), Sanns alleges he conceived of the invention of Count 1 in this interference "on or about February 5, 1986" (see paragraph 6 of Paper Number 8) and that the "[a]ctive exercise of reasonable diligence toward reducing the invention to practice began on or about February 5, 1986" (see paragraph 8 of Paper Number 8). Additionally, Sanns alleges that the invention "was first actually reduced to practice on or about February 5, 1986" (see paragraph 7 of paper Number 8).

In his brief, however, Sanns has chosen to proceed solely by attempting to prove that he is the first inventor of the subject matter of Count 1 by proving an actual reduction to practice prior to Martinez' effective filing date of

October 17, 1988. Accordingly, we shall limit our consideration of Sanns' evidence for priority to the extent it is relevant to proving his priority case based on his theory that he actually reduced to practice the subject matter of Count 1 before Martinez' effective filing date of October 17, 1988.

The facts concerning Sanns' actual reduction to practice are not disputed by the parties. While working in the Automotive RIM⁴ group at Bayer in 1985, Sanns became convinced that mica could be used as the filler material for filled polyurethane and/or polyurea (SR201-204). Sanns ordered some mica filler material from the J. M. Huber Corporation (SX17(c)) and inspected the mica to determine its physical properties (SR220, 223-225). Thereafter in February 1986, Marsh, a technician working for Sanns, prepared two sets of plaques of polyurethane and/or polyurea in a RRIM⁵ machine using the mica from J. M. Huber as the filler (SR295, 409). Marsh recorded the preparation of the plaques in his laboratory notebook (SX9, SX10). Marsh forwarded the plaques

⁴ Reactive injection molding.

⁵ Reinforced reactive injection molding.

to Dzikowski, a technician working for Sanns, for testing, including distinctness of image testing using a "glow box" (SX7). Dzikowski recorded the formulations of the plaques based on the information he received from Marsh (SX7). Dzikowski performed "glow box" tests on the plaques and compared them to steel panels similarly painted and found the plaques prepared by Marsh possessed extraordinary distinctness of image (DOI) (SX7, ¶'s 9, 10 and 15).

In a report to Sanns (SX 8), Dzikowski noted the results he obtained and expressed his opinion that the plaques gave the best DOI results he had ever seen. Dzikowski strongly recommended to Sanns that he follow up on the plaques as prepared. Both Dr. Taylor and Sanns received Dzikowski's report (SR514, 515; SX20). Subsequently, in March 1986, Marsh prepared a another set of plaques from a polyurethane and/or polyurea filled with mica from the J.M. Huber corporation and recorded the materials used to prepare the plaques in his notebook (SX13). In May 1986, Dzikowski performed paintability tests on the plaques prepared by Marsh in March, including DOI measurements using a "glow box" (SX7, ¶22, SX11, SX12). The second set of plaques also yielded a DOI within 10

DOI units of similarly painted steel. Dzikowski reported the results for the second set of plaques to Sanns on May 2, 1986 (SX14).

After obtaining the first results of the DOI tests in February 1986 from Dzikowski, Sanns prepared a memorandum of invention on February 13, 1986 (SX21). Dr. Taylor, Sanns' immediate supervisor, remembers reviewing the memorandum of invention (SR516, 517). After the memorandum of invention was prepared, the plaques were sent to Florida for weathering tests (SR256).

In November 1987, Bayer became involved with Ford Motor Company's project to prepare truck body parts from plastic (SR263-266). Ford became interested in Bayer's reinforced RIM urethanes using mica as a filler, although Ford did not know what filler was used by Bayer. In March 1988, molding trials were scheduled in Florence Kentucky but actually took place in May 1988 (SX44; SX64).

In early 1988, Marsh prepared additional plaques using Huber WG-2 mica filler (SR539-540; SX38; SX59)). In April 1988, William Bain prepared the plaques for painting and painted the plaques and used similarly painted steel panels

for control plaques (SR21; 23-25; SX2). Bain then took DOI readings of the plaques and entered them in his notebook (SR19; SX2). Bain prepared a report which included the results of his testing. Both Dr. Taylor and Sanns reviewed Bain's report on his efforts (SR295; SR540).

In April 1988, Sanns sent a memorandum to Mr. Preis, Bayer's patent counsel, outlining some specifics concerning further work related to his memorandum of invention (SX40). Sanns was becoming frustrated with Preis because a patent application had not yet been filed (SR402). Ultimately, Sanns' first patent application directed to the subject matter of the count in this interference was filed in June 1989.

In his brief, Sanns urges that he actually reduced to practice an embodiment within the count not later than July 21, 1988, the date the parties have stipulated as the date it was first appreciated by Sanns that the mica used by him in the February 1986 and March 1988 plaques satisfied the limitations of Count 1 with respect to the thickness and aspect ratio of the mica filler (Sanns' main brief, p. 29). Martinez urges that the date of an actual reduction to practice is earlier than the date of the stipulation.

Specifically, Martinez argues that the February 1986 tests by Dzikowski of the plaques prepared by Marsh at Sanns' direction constitute an actual reduction to practice by Sanns (Martinez Brief p. 7). Based on the date argued by Martinez to represent the date of Sanns' earliest actual reduction to practice, Martinez argues that the time from actually reducing to practice the invention of Count 1 until filing the Sanns application was so long and unreasonable as to raise an inference of abandonment, suppression or concealment by Sanns.

More specifically, Sanns argues that in light of the above-described plaque preparation and testing, considered with the stipulations of the parties concerning the mica filler used and the nature of the polymer in which the filler was dispersed, we should find Sanns actually reduced to practice an embodiment within the count of this interference not later than July 21, 1988, the date of the stipulation concerning the nature of the mica used. Martinez argues in his brief that the activity in February and March 1986 by Marsh and Dzikowski on behalf of Sanns constituted an actual reduction to practice of an embodiment within the count (Martinez Brief p.8). Martinez concedes the work performed on

behalf of Sanns in 1986 and Sanns' memorandum of invention lack evidence of any appreciation of the limitation of the count with respect to the particle size of the mica or its aspect ratio (Martinez Brief p.8). Nevertheless, Martinez urge that we should accept Sanns' uncorroborated testimony that he had determined both the particle size and aspect ratio for WG-2 mica in 1985 or 1986. Martinez urges that based on a February 1986 actual reduction to practice, Sanns took more than 40 months to file their first patent application on the subject matter of the count. Martinez argues that the time period is sufficiently long as to be "unreasonable" and, therefore, raises an inference that Sanns abandoned, suppressed or concealed his invention within the meaning of 35 U.S.C. § 102(g).

OPINION

It is by now well-settled that an actual reduction to practice may not be established *nunc pro tunc*. Langer v. Kaufman, 465 F2d. 915, 919-20, 175 USPQ 172, 174 (CCPA 1972); Heard v. Burton, 333 F2d. 239, 243-44, 142 USPQ 97, 100 (CCPA 1964). Equally well-settled is the prerequisite that the actual reduction to practice must include a contemporaneous

recognition and appreciation of the invention represented by the count by the inventor at the time the reduction to practice was made. Breen v. Henshaw, 472 F.2d 1398, 1401, 176 USPQ 519, 521 (CCPA 1973). There can be no actual reduction to practice without proving a physical embodiment which includes all the limitations of the count has been prepared. U.M. C. Electronics Co. v. United States, 816 F.2d 647, 652, 2 USPQ2d 1465, 1468 (Fed. Cir. 1987).

While the parties have stipulated that the various starting materials set forth in Marsh's notebooks, when reacted together, would form a polyurethane and/or polyurea (SR479, 480), the parties have also stipulated that Sanns did not become aware of either the particle size or the aspect ratio of the mica required by the count until July 21, 1988. Thus, Sanns did not and could not have had an appreciation or recognition of the requirements of the count with respect to either the particle size or aspect ratio which was contemporaneous with the activity in February 1986, March 1986 or May 1988.

According to Sanns' testimony, he instructed Marsh, now deceased, to prepare polyurethane/polyurea plaques in a

RRIM machine using mica as a filler. Marsh's notebooks reflect that he actually prepared such plaques in February and March 1986 and again in early 1988. Marsh's notebooks were recognized by Dr. Taylor and Dzikowski as authentic and Bain also recognized the notebooks as being Marsh's. Dzikowski and Bain's notebooks establish that the plaques containing WG-2 mica from J.M. Huber exhibited a DOI when painted that is "within about 10 DOI units of the distinctness of image of similarly painted steel." Dzikowski's report of February 13, 1986, also indicates that polyurethanes filled with mica exhibited DOI's within the limitations of the count and his report also indicated he was extremely impressed by the results for the mica-filled polyurethanes. Dr. Taylor recalled having seen Dzikowski's report. Dzikowski prepared a similar report in May 1986, reflecting the results obtained for the plaques prepared by Marsh in March 1986.

The testimony of Dr. Taylor, Dzikowski and Bain adequately corroborates Sanns' testimony concerning the production and successful testing in 1986 and again in 1988 of plaques which, when considered with the stipulation concerning the properties of J.M. Huber WG-2 mica, meet all the

requirements of the count in this interference as of July 21, 1988, the date of the stipulation. Lacotte v. Thomas, 758

F.2d 611, 225 USPQ 633, 634 (Fed. Cir. 1985); Knorr v.

Pearson, 671 F.2d 1368, 1373, 213 USPQ 196, 200 (CCPA 1982);

Berges v. Gottstein, 618 F.2d 771, 205 USPQ 691, 695 (CCPA 1980). Accordingly, we find that the plaques prepared and tested in February and March of 1986 and those prepared and tested in March and May 1988, including the "glow box" test results for said plaques, meet all the requirements of Count 1 not later than July 21, 1988, the date the parties have stipulated Sanns learned from Dr. Gary Freeman from J.M. Huber that WG-2 mica "satisfied the aspect ratio and thickness limitations of the Count in interference."

We consider Martinez' argument that the activity by Marsh on behalf of Sanns in 1986 constitutes an actual reduction to practice to be unpersuasive. Martinez has conceded in their brief that Sanns' own uncorroborated testimony is insufficient as a matter of law to establish the testimony is reliable (Martinez brief, p.2). Additionally, the record establishes that neither Marsh nor Dzikowski nor

any other person at Bayer knew in 1986 the nature of the mica filler used in the preparation and testing of the plaques.

While Sanns claims to have taken photographs of the mica he allegedly measured, said photographs are not of record in this proceeding. Additionally, nothing in Sanns' testimony or in the record before us, evidences that Sanns appreciated that WG-2 mica had a particle size of less than 1.5 microns or an aspect ratio of greater than 40 as required by Count 1. Indeed, Sanns' memorandum of invention only mentions the mica by its proprietary name "WG-2" and does not satisfy Count 1 with respect to either particle size or aspect ratio. Sanns' notebook page attached to the memorandum of invention only speaks of an aspect ratio of "greater than 20 or 30" and a particle size "smaller than 1/64 inch".

In our opinion, Martinez is attempting to prove, nunc pro tunc, that the work performed for Sanns in 1986 and 1988 is transformed via the stipulation of the parties to an actual reduction to practice relating back to the date of the actual work. However, as we have stated above, establishing a reduction to practice, nunc pro tunc, is not possible.

We have also considered Sanns' memorandum of invention (SX21) as evidence of Sanns' conception of the subject matter of Count 1 in February 1988. However, for reasons set forth above, the memorandum of invention and Sanns' attached notebook page do not establish an appreciation by Sanns as of the date of the memorandum of the limitations of the count with respect particle size and aspect ratio. attached notebook page alludes only to "smaller particle size than 1/64"" and that "aspect ratio is important for physical reinforcement, and should be > 20 or 30." While the attached notebook page and the memorandum refer to WG-2 mica from J.M. Huber, appreciation of the properties of that product has been stipulated by the parties to have occurred not later than July 21, 1988. There is no other evidence in this record to which Martinez has directed our attention which establishes Sanns knew of the properties as required by the count before the stipulated date.

Accordingly, we find that Sanns, the junior party, has established by a preponderance of the evidence, that he actually reduced to practice an embodiment within the subject matter of Count 1 not later than July 21, 1988. Because

Martinez, the senior party has elected not to put on a priority case of his own, Sanns shall be denominated the first inventor of the subject matter of Count 1 and judgment issued in his favor unless Martinez proves that Sanns abandoned, suppressed or concealed his invention. 35 U.S.C. § 102(g) (1999).

ABANDONMENT, SUPPRESSION OR CONCEALMENT

Although Sanns bears the burden of proving priority of invention by a preponderance of the evidence (which burden we have held he has sustained), the burden of proving by a preponderance of the evidence that Sanns suppressed or concealed their invention within the meaning of 35 U.S.C. § 102(g) falls upon Martinez, the senior party. Gallagher v. Smith, 206 F.2d 939, 99 USPQ 132 (CCPA 1953). There is no dispute that Martinez timely filed his notice of his intention to argue that Sanns abandoned, suppressed or concealed an actual reduction to practice. See 37 C.F.R. § 1.632 (1998).

We agree with Martinez that where there is an "unreasonable" period of delay between an actual reduction to practice and the filing of an application for patent there exists a basis for inferring an intent to suppress or conceal

the invention. Lutzker v. Plet, 843 F.2d 1364, 6 USPQ2d 1370 (Fed. Cir. 1988); Correge v. Murphy, 705 F.2d 1326, 217 USPQ 753 (Fed. Cir. 1983); Shindelar v. Holdeman, 628 F.2d 1337, 207 USPQ 112 (CCPA 1980); Horwath v. Lee, 564 F.2d 948, 195 USPQ 701 (CCPA 1977); Peeler v. Miller, 535 F.2d 647, 190 USPQ 117 (CCPA 1976); Steinberg v. Seitz, 517 F.2d 1359, 186 USPQ 1359 (CCPA 1975); Young v. Dworkin, 489 F.2d 1277, 180 USPQ 388 (CCPA 1974); Brokaw v. Vogel, 429 F.2d 476, 166 USPQ 428 (CCPA 1970); English v. Heredero, 200 USPQ 597 (Bd.Pat.Int. 1978). While the question of whether or not Sanns abandoned, suppressed or concealed his invention is an ultimate conclusion of law, it is based on the particular facts of this case just as every question of suppression or concealment is founded on the particular facts of each case. Brokaw, 429 F.2d at 480, 166 USPQ at 430, 431.

Assuming that Martinez satisfies his burden of persuasion and establishes that the time period involved under the facts of this case was prima facie unreasonably long, Sanns may still overcome the presumption by showing sufficient activity during the time period involved towards perfecting or improving his invention or other activities which "excuse, explain or justify the delay." Young, 489 F.2d at 1281, 180

USPQ at 391 n.3 citing with approval Frey v. Wagoner, 87 F.2d 212, 32 USPQ 239 (CCPA 1937); Steinberg, 517 F.2d at 1364, 186 USPQ at 213; Peeler, 535 F.2d at 655, 190 USPQ at 123; Horwath, 564 F.2d at 952, 195 USPQ at 705; Shindelar, 628 F.2d at 1341, 207 USPQ at 116; Correge, 705 F.2d at 1329, 217 USPQ at 755; Lutzker, 843 F.2d at 1367, 6 USPQ2d at 1371.

"[W]ithout an actual reduction to practice there is no invention in existence which can be abandoned, suppressed, or concealed." Peeler, 535 F.2d at 651, 190 USPQ at 120. Thus, because we have already found that Sanns reduced an embodiment within Count 1 before Martinez' effective filing date, the starting point of our analysis on this issue begins with what is the date which Sanns has proven for an actual reduction to practice.

We have held above that Sanns' earliest date for an actual reduction to practice is July 21, 1988. Based on that date, the time elapsed between reducing to practice an embodiment within the count and Sanns filing his application becomes 11 (eleven) months. Martinez has not even addressed in his brief let alone proved whether or not 11 (eleven) months constitutes such an unreasonable amount of time as to raise an inference of an abandonment, suppression or concealment of the subject matter of the count. On that basis alone, we find that Martinez has not met his burden of

persuasion. Nevertheless, on the facts before us, in this particular case, we also find that the eleven months between Sanns actual reduction to practice of an embodiment within the count and the filing of an application for patent, is not so long or unreasonable as to raise an inference of abandonment, suppression or concealment.

Notwithstanding our conclusion above, Martinez could still prevail if he established that other evidence in this record proved that Sanns reduced his invention to practice before the July 21, 1988, stipulation date and proved that the time between that earlier reduction to practice and Sanns' filing date was so long as to raise an inference that Sanns abandoned, suppressed or concealed his invention. Martinez has, in fact, argued that the February 1986 plaques prepared by Marsh after testing by Dzikowski established the plaques had a DOI within 10 DOI units of similarly painted steel, constituted an actual reduction to practice of the subject matter of Count 1.

Nonetheless, we have already held that Sanns did not prove that he had a recognition or appreciation in 1986 of the limitations in Count 1 regarding both the particle size of the mica and the aspect ratio of the mica. Absent such recognition by Sanns, we have also held that the actual reduction to practice by Sanns, based on the work performed in

1986, becomes the date of the parties' stipulation concerning the WG-2 mica used in 1986, that is, July 21, 1988. Once again, we remind Martinez that the stipulation does not, based on the stipulation, relate back to the work performed in 1986 and transform it, nunc pro tunc, to an actual reduction to practice.

Martinez' argues that Sanns subsequent work in 1988 was directed to commercialization and thus may not be relied on as activity which excuses the delay. However, the work performed in March 1988 was before July 21, 1988, the date on which we have found Sanns actually reduced to practice an embodiment within Count 1. Accordingly, at the time of the work there was not yet an actual reduction to practice of the subject matter of the count. While the plaques tested, admittedly, required further development and improvement before they were considered to be commercially acceptable, there is also no requirement that to constitute an actual reduction to practice the invention, when tested, be in a commercially satisfactory or commercially complete stage of development. In re Anthony, 414 F.2d 1383, 162 USPQ 594 (CCPA 1969).

Martinez has also argued that Sanns work from February 1986 does not include mold release agents but Sanns' claims corresponding to the count do. In view of our holding

that Sanns did not reduce to practice an embodiment within the count until July 21, 1988, Sanns work in 1986 is not relevant to the time period in question. However, we observe that there is no requirement that the physical embodiment relied upon as an actual reduction to practice include every essential limitation of a party's <u>claims</u> corresponding to the count. Rather, the physical embodiment relied on as an actual reduction to practice must include every essential limitation of the <u>count</u>. <u>Correge</u>, 705 F.2d at 1329, 217 USPQ at 755.

We have not overlooked Martinez' alternative position that Sanns' had a deliberate policy directed to concealing his invention from the public (Martinez' brief, p.6, 7, 9-11). To the extent the concealment was by Bayer, Martinez suggests that Bayer's action is imputable to Sanns, the inventor (Martinez brief, p.9, f.n. 9). Nevertheless, the alleged deliberate policy of concealment occurred at a time, February "1986 until at least the middle of 1988" (Martinez brief p.10), when Sanns had not yet reduced to practice an embodiment within Count 1. As we stated above, without an actual reduction to practice there can be no

The record in this interference does not establish that either of the involved parties' respective application and patent are assigned. The parties are ordered within 10 (ten) days of the date of this opinion to file the appropriate paper under 37 C.F.R. § 1.602(c).

abandonment, suppression or concealment of an actual reduction to practice.

Moreover, as the party urging that Sanns deliberately concealed his invention, Martinez bears the burden of providing proof of specific intent where, as here, the time period between reducing the invention to practice and filing an application for patent is not unreasonable and does not raise an inference of intent to suppress or conceal.

Peeler, 535 F.2d at 653, 190 USPQ at 122; Dewey v. Lawton, 347 F.2d 629, 146 USPQ 187, 189 (CCPA 1965). We find, on this record, that Martinez has not met his burden of persuasion on this issue.

MARTINEZ' MOTION TO STRIKE

In Paper Number 44, Martinez has moved to strike the portions of Sanns' brief which allege that Martinez derived the invention of Count 1 from Sanns. As correctly noted by Martinez in his motion, Sanns has not alleged derivation by Martinez in his preliminary statement as required by 37 C.F.R. § 1.625 and therefore it may not properly be raised before us in Sanns' brief. 37 C.F.R. § 1.655.

Accordingly, Martinez' motion is herein **DISMISSED** as moot.

JUDGMENT

Having decided all the issues properly raised by the parties in their briefs, it is now appropriate for us to enter judgment in this interference pursuant to our authority under 37 C.F.R. § 1.658(a). Accordingly:

Judgment as to the subject matter of Count 1 in this interference is awarded to Frank Sanns, Jr., the junior party. Frank Sanns, Jr., the junior party, is entitled to a patent containing claims 9 through 11 of his involved application corresponding to Count 1.

Judgment as to the subject matter of Count 1 in this interference is awarded against Eloy C. Martinez, the senior party. Eloy C. Martinez, the senior party, is not entitled to his involves patent containing claims 1 through 25 corresponding to Count 1.

AHM/dal

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